

CLAIMS:

1. A corkscrew comprising a body (20) and a handle (24),
the body including a socket (2) adapted to receive the neck of a bottle sealed by a cork,
an actuation lever (24),
an axially rotatable worm spiral (25) mounted on a carriage within the body (20) and
arranged to rotate and penetrate the cork as the lever (24) is lowered, the spiral (24) being
further arranged to cease rotation as the lever (24) is raised to withdraw the cork from the
bottle,
the corkscrew being further arranged to discharge the cork from the spiral (25) by lowering
and raising the lever after the neck of the bottle has been removed from the socket (2);
wherein the carriage is mounted for movement between upper and lower positions along
one or more, preferably two, guide runners (4) extending longitudinally of the body,
the spiral (25) being connected to the carriage by a bearing (6), the spiral (25) being
rotatable with respect to the bearing (6),
and further comprising a guide member (7) having a guideway the screw extending
through the guideway, the guideway being adapted to cause the screw to rotate as the
screw moves axially through the guide member,
first latch means (21) being adapted to releasably engage the guide member to the
corkscrew body, and
second latch means (13) being adapted to releasably engage the guide member to the
carriage.
2. A corkscrew as claimed in claim 1 wherein the guideway (7) includes a helical
threaded bore adapted to receive the helical spiral (25), permitting the spiral to rotate as the
guide member (7) moves axially relative to the spiral.
3. A corkscrew as claimed in claim 1 or 2 wherein the first latch is actuated by
insertion of the neck of a bottle into the socket.

4. A corkscrew as claimed in any preceding claim wherein when the first latch is engaged, the guide member and carriage may move together to withdraw a cork from the bottle.
5. A corkscrew as claimed in any preceding claim wherein when the opened bottle is removed from the socket, the first latch moves under action of a spring (31), to an armed position, wherein the guide member is engaged and prevented from further movement when it is moved to the lower position.
6. A corkscrew as claimed in any preceding claim wherein the second latch means is actuated by the first latch means.
7. A corkscrew as claimed in claim 6 wherein when the first latch is in the armed position, the second latch is opened.
8. A corkscrew as claimed in any preceding claim wherein when a bottle has been removed from the socket, the first latch member causes the second latch to move to an open position, wherein the carriage may move freely with respect to the guide member.
9. A corkscrew as claimed in claim 8 wherein when a bottle neck is inserted into the socket, the second latch is urged into an armed position wherein the carriage is engaged as it moves to a lower position.
10. A corkscrew as claimed in any preceding claim wherein the first latch comprises one or more resilient members (9) secured to the interior of the socket and biased inwardly towards the guide member.
11. A corkscrew as claimed in claim 10 wherein the first latch includes a hook (15) with a downwardly facing restraining surface.
12. A corkscrew as claimed in any preceding claim wherein the first latch (21) extends from an attachment to a lower part thereof to the corkscrew body and includes an

upper, downwardly facing restraining surface located to engage a complementary upwardly extending abutment surface of the guide member (7).

13. A corkscrew as claimed in claim 12 wherein the first latch member (21) has a radially inwardly facing bottle engaging surface.

14. A corkscrew as claimed in any preceding claim wherein the guide member is located on runners between the carriage and socket.

15. A corkscrew as claimed in any preceding claim wherein the second latch member is elongate in the longitudinal direction.

16. A corkscrew as claimed in claim 15 wherein the second latch member is mounted on a pivot on the guide member, the upper end being urged inwardly by a spring.

17. A corkscrew as claimed in claim 15 wherein a lower portion of the second latch member is adapted to engage and cooperate with a complementary surface of the first latch member.

18. A corkscrew as claimed in any preceding claim wherein the second latch member comprises a plate having an aperture adapted to receive and engage a lug extending outwardly from the carriage.

19. A corkscrew as claimed in any preceding claim wherein the upper end of the socket includes an annular ring having a circular groove dimensioned to receive and engage the neck of a bottle, the annulus of the ring defining a cork receiving passageway having a diameter greater than a cork and the passageway having a length sufficient to allow complete withdrawal of the cork into the passageway as the screw and cork are withdrawn from the bottle in use.

20. A corkscrew as claimed in any preceding claim including gripping means (27, 28) adapted to move inwardly when grasped by a user to engage and prevent movement of the neck of a bottle received in the socket.
21. A corkscrew as claimed in claim 20 wherein the gripping means (27, 28) comprise a pair of arms pivotally mounted on the body.
22. A corkscrew as claimed in claim 21 wherein the gripping means carry bottle engaging pads (29).